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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,110	06/26/2001	Harold L. Mantius	00414-057001	4393

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EXAMINER	
PRATT, HELEN F	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/892,110	MANTIUS ET AL.	
	Examiner	Art Unit	
	Helen F. Pratt	1761	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18,23,24,29-48,53,54,59 and 60 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-18,23,24,29-48,53,54,59 and 60 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-18, 25-28, 31-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black, Jr. et al. (5,403,604) in view of Gresch (5,496,577),Strobel et al. (4,971,813) and Lenoble et al. (5,908,650).

Black et al. disclose a process of separating sugar and acid from juices to make a nutritious high Brix/acid ratio juice fraction and a low calorie, B/A ratio content juice fraction. The low calorie juice fraction is sweetened with a high potency sweetener. The sugar separation process involves ultrafiltration (claim 8) (abstract). The reference discloses that a low-sugar juice, which contains higher-molecular components, is known (col. 4, lines 15-20). Claims 1, 2 and 8 differ from the reference in the combining of relatively high molecular weight phytochemical-rich juice fraction with a second portion of the fruit juice. However, since the sugar and acids have been removed from the first portion of juice, this portion is considered to also be a high molecular weight phytochemical-rich juice fraction. Gresch discloses desugaring a juice and then adding a stream of juice with a high acid brix ratio into the first stream of desugared juice (col.

6, lines 50-64). Since one stream is desugared and deacidified, it is considered to have been rich in phytonutrients as in the claimed process. Even though the second stream in the reference to Gresch is high acid and brix, it is not excluded by the claim language which only requires a second portion of fruit juice, but does not state the chemical make up of that juice (col. 6, lines 50-64). Strobel et al. disclose that it is known to remove aroma and flavor volatiles from a juice stream and then return them to a sugar reduced juice (abstract). Lenoble et al. disclose that it is known to remove sugar from a juice, which leaves an anthocyanin pigment additive (phytochemical) which can be used to enrich foods (col. 7, lines 5-48, lines 60-65 and col. 8, lines 1-10). The anthocyanin pigment can be from cranberries (col. 11, lines 5-10). Therefore, it would have been obvious to combine the high acid brix juice stream of Gresch or the aroma and volatiles of Strobel, or the anthocyanin pigments of Lenoble with foods or a desugared juice because these references disclose adding back phytochemical fractions such as aroma and volatiles and anthocyanin pigments to enrich a juice stream or a food product.

Claim 2 further requires combining the lower molecular weight sugars and acids-rich juice fraction with a third portion of juice to make a sugars and acids rich fruit juice. Gresch discloses adding a second stream of high sugar to a sugar reduced stream (abstract). Certainly, various variations of adding enriched streams or reduced streams to juices is within the skill of the ordinary worker depending on the end product required. Therefore, it would have been obvious to add particular enriched or reduced acid and sugar streams to juices.

Claims 3 and 4 further require concentrating the enriched or reduced streams. Gresch discloses concentrating the initial product (col. 7, lines 5-10). Therefore, it would have been obvious to remove water to make a concentrated product.

Claim 5 further requires that the fruit juice is cranberry juice. Strobel discloses the use of cranberries (col. 4, lines 10-20). Therefore, it would have been obvious to use cranberries as the fruit of the fruit in the process of the combined references.

Claims 6 and 7 are to the product prepared by the processes of claims 1 and 2. Claim 25 is also a product by process claim. The fact that the procedures of the reference are different than that of applicant is not a sufficient reason for allowing the product-by-process claims since the patentability of such claims is based upon the product formed and not the method by which it was produced. See In re Thorpe 227 USPQ 964. The burden is upon applicant to submit objective evidence to support their position as to the product-by-process claims. See Ex parte Jungfer 18 USPQ 2D 1796. The composition has been shown by the above combined references. Therefore, it would have been obvious to make the composition as disclosed.

Claim 9 is to further combining the low molecular weight sugars and acids-rich rich fruit juice with juice to create an enriched juice product. Strobel in particularly discloses adding a juice without sugar with fresh juice (col. 11, lines 5-8). As above, it would have been within the skill of the ordinary worker to add the various fractions to juices to make whatever type of product once it is known to reduce the sugar and acid in a juice stream. Therefore, it would have been obvious to enrich juice streams as

shown above. The further limitations of claims 10-18 have been discussed above and are obvious for those reasons.

The limitations of claims 31-48 have been disclosed above and are obvious for those reasons.

Claims 23, 24, 29, 30, 53, 54, 59, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above combined references as applied to the above claims, and further in view of Nelson et al. (page 66).

Claims 23 and 24, 30, 53, 54, 59, 60 further require drying the various juice fractions. However, drying is very well known of any juice product as disclosed by Nelson (page 66). Claim 29 further requires that the phytochemical rich fruit juice powder is a dietary supplement. The composition has been shown, therefore it would have been obvious to use it as a dietary supplement, if it has nutritional value. Claim 30 further requires that the product is a tablet. However, tableting of various ingredients is well known as in various pills. No patentable distinction is seen in the use of vegetable juices as opposed to fruit juices as there is often confusion about which is which. For instance, is a tomato a fruit or a vegetable? The limitations as to the juice being a vegetable juice have been discussed above in regards to fruit juice since no patentable distinction is seen at this time. Therefore, it would have been obvious to dry the claimed product and to make a tablet of it or to use the composition as a dietary supplement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hp 9-6-04

H. Pratt

HELEN PRATT
PRIMARY EXAMINER